### BELLSOUTH TELECOMMUNICATIONS, INC

# The BellSouth Analysis of Competitive Entry Model Users Guide

# BACE Model-BellSouth Analysis of Competitive Entry

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# Chapter

# The BellSouth Analysis of Competitive Entry Model (BACE)

BACE is a business case tool which models the startup, operation and growth of a competitive local exchange carrier (CLEC). Based upon user adjustable inputs and supplied customer demographics and demand information, BACE calculates a series of cash in-flows and out-flows. These cash flows are the expected result of entry, operation and growth of a CLEC over a 10 year operating period. This series of cash flows is discounted to generate a Net Present Value (NPV) for the CLEC.

Because of the flexibility and the granularity of information available, BACE can determine NPV at multiple geographic levels (wirecenters, market areas, LATAs and states) or over multiple types of CLEC business plans (local provider only, long distance/bundled offerings, DSL provider, etc). Further, BACE can also take into account the aspects of the CLEC's economic scope and scale such as its purchasing power of the CLEC relative to the incumbent.

#### Learning About BACE

BACE documentation is available in two forms.

The *BACE Users Guide* is designed to help you install the software, examine and modify study assumptions and produce output reports.

The *BACE Methodology Manual* discusses how BACE complies with applicable regulatory guidelines, follows standard economic and business practices and calculates the cash inflows and outflows necessary to determine NPV during the study horizon.

#### Getting Help

If you need help with BACE, support is available from a number of sources.

First, consult this manual or the BACE Methodology Manual.

Second, email the designated support contact provided by BellSouth Telecommunications, Inc at BACE.support@bellsouth.com.

#### System Requirements

The business case assumptions BACE analyzes are complicated and computationally intensive. Thousands of user inputs are run through the calculation engine before results can be developed.

Despite the complexity of the modeling task, BACE runs on business class computers under Microsoft Windows 2000® or Microsoft Windows XP Professional® operating systems. Minimum recommended hardware requirements are listed below.

- Microsoft Windows 2000® or Microsoft Windows XP Professional® compatible personal computer with Pentium® III 1.5 GHz or equivalent processor
- 25 Gb available hard drive space
- 512 Mb RAM
- CDROM Drive
- Video adaptor and monitor capable of displaying 1024 x 768 resolution

Software requirements include the following:

- BACE Setup Application
- Microsoft Excel 2000® or XP® to display reports.

Although not required to run BACE, Microsoft Access® may be useful for inspecting large reports.

Please Note: BACE was designed to operate, process and report from a single personal computer. It was not designed for any other computing architecture such as client/server, distributed or emulative.

#### Installing BACE

BACE is installed by running the setup package. The BACE setup package is provided either on CD or downloaded via secure file transfer.

Regardless of how you obtained BACE, locate the setup application BACE\_Y\_Y\_XX.exe (Y\_Y represents the application version and XX represents the two letter state abbreviation).

To start the installation, close all open applications and double-click the setup program icon. Then, follow the on-screen prompts.

During installation, depending on your version of Microsoft Windows®, you may be prompted with a warning that BACE is trying to install a version of a file older than a file currently on your computer.



Figure 1-Version Conflict Warning

If this happens, keep the version of the file currently on your computer by clicking **Yes.** You may need to reboot your computer to complete the installation.

Before the application installs, you will need to read and agree to abide by the license agreement displayed.

#### Installing Processed Scenario Data

You can also obtain a self extracting file containing processed scenario data. The processed scenario data gives you access to a fully processed BACE run with corresponding output reports.

Locate the data setup application **BellSouth\_Y\_XX.exe** (where **XX** represents the two letter state abbreviation and **Y\_Y** represents the BACE version). To start the installation, close all open applications and double-click the setup program icon.

By design, the processed scenario data installs to the default BACE installation directory (c:\program files\bace\_XX\_Y\_Y). When installing the processed data, you may be prompted that you are overwriting existing files. This is intentional, you will be overwriting an empty scenario with the processed data.

#### Logging In

Because the BASE application and data are confidential and proprietary, you must provide a User Id and password each time you run the application.

The initial User ID is **tro\_user**. The initial password is **une\*001**.

After you start BACE for the first time, you will be prompted to create a new password. BACE requires you to reset the password every sixty days. If you forget your password, you must reinstall BACE. Password rules are provided in Chapter 7 of this document.

#### **BACE** Review and Evaluation

With this version of BACE, we now include a demonstration scenario. The scenarioand resulting processed databases-will allow a user to see the structure of the system and tables, all intermediate tables, and follow the processing of the model.

With these three items, the user should be able to track through the BACE system much in the same way as have the developers and testers.

As the demo scenario is processed, demo\_inputs.mdb is combined with Demo\_sec.mdb (which contains non proprietary customer demographic data) and the intermediate processed tables to produce Demo.mdb. In other words, Demo.mdb is a combined database which contains the fully processed information from BACE processing. In a real scenario, this combined database is locked from users. However, in the "Demo" scenario, the user can access the database with the password of "demo". The password is maintained for application compatibility purposes.

For non-demonstration scenarios, this combined database is locked from view. To allow the user to review the majority of the intermediate processed tables, BACE creates a linked database "ScenarioName"\_intermediate.mdb. For the demonstration scenario this Demo\_Intermediat.mdb file provides little value since Demo.mdb is accessible



# Getting Started

This section of the *BACE Users Guide* will walk you through the setup of a business case using the BACE wizard.



It is important to remember that the Wizard was designed to walk you through key inputs and to simplify business case production. However, there may be circumstances where you would like to modify detailed assumptions like product prices or equipment costs. These detailed assumptions are beyond the scope of the Wizard. If this is the case, the appendix in the BACE Methodology Manual describes each of the data tables and their intent. You can then modify the detailed tables and run a

manual study (see Chapter 5) outside of the Wizard.

When you start BACE, the Wizard will automatically appear. At any other time, you can click on the Wizard's hat icon. The Wizard guides you through 3 major steps: Selecting the Input Scenario, Modifying Inputs and Selecting Reports.

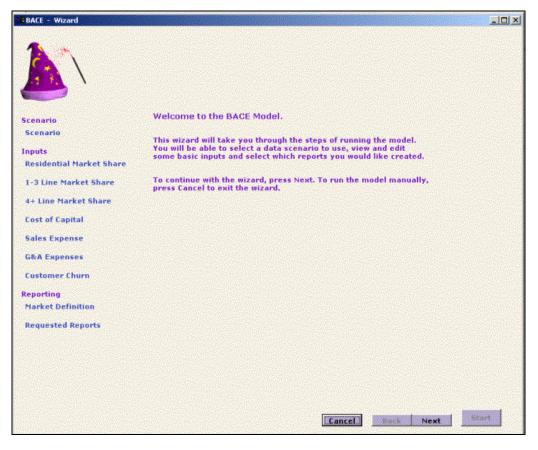


Figure 2--Wizard Main Screen

The Wizard guides you through a series of questions. The questions help define parameters of the study. The questions which BACE poses, follow the topics on the left edge of the Wizard screen (e.g., Residential Market Share, Cost of Capital, etc.).

You can also press the **Back** button to move to a prior screen or **Next** to advance to a later screen.

#### Selecting the Input Scenario

The Wizard's first step allows you to either select an existing scenario or create a new scenario to process.

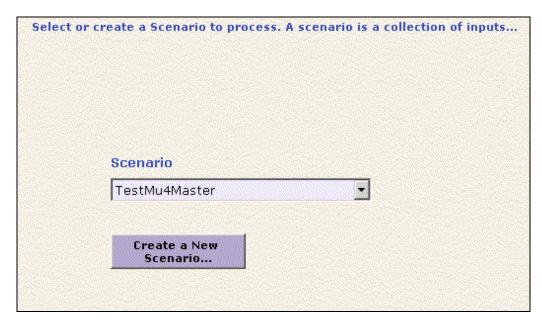


Figure 3--Wizard Scenario Selection

In BACE a scenario is a collection of inputs and processed data.

When you elect to create a new scenario, BACE will ask you to copy from any of the existing scenarios.

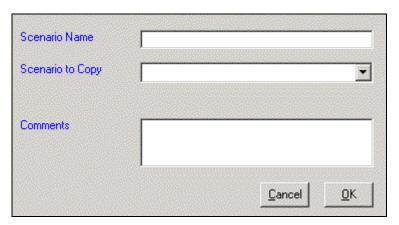


Figure 4--Wizard Creating a New Scenario

Copying from an existing scenario preserves the original scenario, while allowing you to make the changes as you create a new scenario. In this way, you can see the effects of your change without overwriting information in the copied scenario.

On the other hand, if you elect to use an existing scenario, the modifications made in the Wizard will force a permanent change to the existing scenario's inputs. **Note**: The default scenario BellSouth\_XX (where xx represents the state) can not be modified. You can copy this scenario to a new scenario, but you can not overwrite the BellSouth\_XX inputs.

#### Defining Market Share

The first Wizard screens prompt you for information regarding the modeled CLEC's market share. The market share inputs are broken down across 3 screens: residential, business 1-3 lines and business greater than 4 lines.

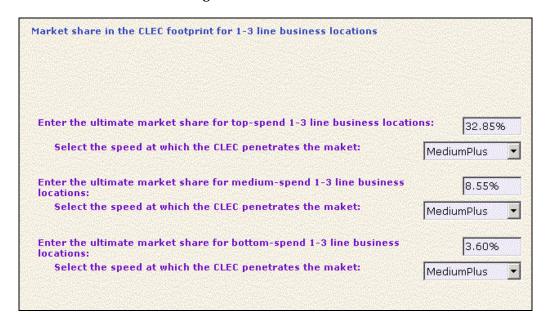


Figure 5--Wizard Setting Business Market Share

BACE asks you for input regarding the ultimate market share (between 0 and 100) and the speed (Fast: 0.5, Medium: 0.35, and Slow: 0.25) at which this market share is achieved. These values are used in a simplified Bass<sup>1</sup> curve to produce yearly penetration values over the 10 year study. The values shown in the Wizard are the current default values in the scenario you selected in the initial step.

BACE requests this input for the following customer segments

- Quintile 1 (Top 20% spend) residential customer locations
- Quintile 2 (20-40% spend) residential customer locations
- Quintile 3 (40-60% spend) residential customer locations
- Quintile 4 (60-80%) residential customer locations

<sup>&</sup>lt;sup>1</sup> BACE uses a simplified Bass Curve to determine yearly market share. The simplification comes from the fact that the coefficient of internal influence is assumed to be 0.

- Quintile 5 (Bottom 20% spend) residential customer locations
- 1-3 line top spend business customer locations
- 1-3 line medium spend business customer locations
- 1-3 line bottom spend business customer locations
- 4-8 line business customer locations
- 9-23 line business customer locations
- 24+ line business customer locations

If you wish to exclude a segment from consideration, enter the ultimate penetration value as a zero.

Changes made on this screen affect the Product Penetration table.

Define the Pre Tax Cost of Capital

Next, BACE asks you to input the CLEC's PRE-TAX weighted average cost of capital.

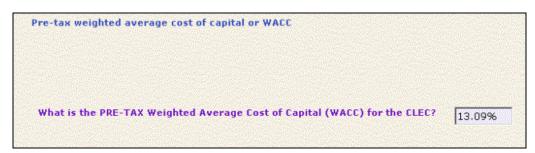


Figure 6--Wizard Setting the Weighted Average Cost of Capital

The value displayed initially is the value stored in the **CLEC Study Properties table**, **PreTaxCostOfCapital**<sup>2</sup>.

Sales Expense

The following screen asks you to define the sales expense (customer acquisition expense.)

<sup>&</sup>lt;sup>2</sup> BACE uses this value along with the values of EquityPct and EquityRate in the CLEC Study Properties table to calculate the After Tax Cost or Capital (i.e., After Tax WACC) that is used by BACE to develop the Net Present Values ("NPV") for impairment analysis.

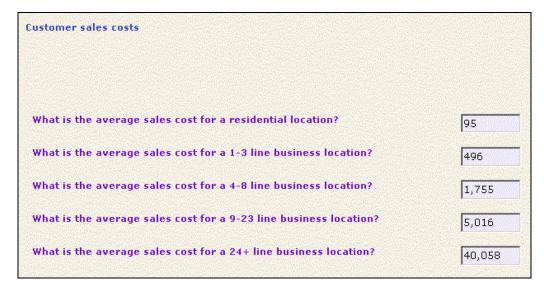


Figure 7--Wizard Entering Customer Sales Costs

Customer Acquisition cost is defined in terms of the size of the customer: 1-3 line customer locations, 4-8 line customer locations, 9-23 line customer locations, 24+ line customer locations. The value displayed initially is the value shown in the Operations Cost Input table.

#### General and Administrative Expense

BACE then asks you to provide the G&A cost as a percent of revenue for providing local services (excluding sales).

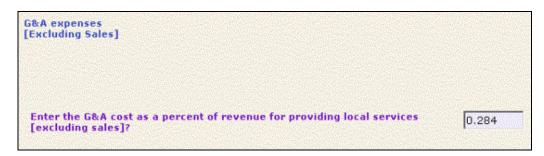


Figure 8--Wizard Setting the G&A Expense

This will update the local services G&A expense in the Cost Input Operations table.

#### **Customer Churn**

The Wizard then asks you for information on monthly customer churn rates for all residential customers, 1-3 line businesses, 4-8 line businesses, 9-23 line businesses and 24+ line business locations.

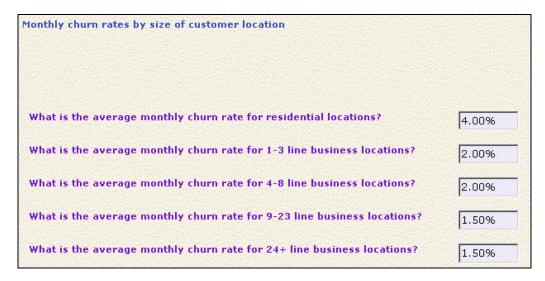


Figure 9--Wizard Entering Customer Churn

While the value entered is in terms of a monthly churn rate, BACE annualizes<sup>3</sup> it before updating the **Churn** tables.

After completing the last input screen, BACE has the information necessary to process the scenario. The remaining questions concern how you wish to see the reported output.

#### Report Setup

The next three Wizard screens guide you through the setup of reporting output.

The first question asks if you wish to include 4-8 line businesses in the Mass Market designation. If you answer "Y", the 4-8 line customers are reported in Mass Market results. If you answer "N", the 4-8 line customers are reported in the Enterprise market results.



Figure 10--Wizard Setting Market Definitions

<sup>&</sup>lt;sup>3</sup> BACE annualizes the monthly churn using the following formula:  $Annual\ Churn = 1 - (1 - MonthlyChurn)^{1/2}$ 

The last question on the screen asks you to define the geographic level of reporting the results. That is, are you interested in seeing reports at the LATA, MSA, or CEA level, combined with the UNEZone? Each of these geographic areas is defined (in terms of the wirecenters contained in each) within the **Exchange Demographics** Table.

#### Report Output

The final portion of the Wizard asks which standard BACE report you wish to run. The BACE wizard provides the following standard reports.

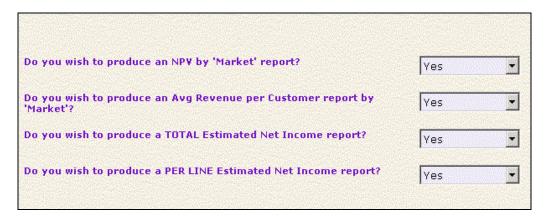


Figure 11--Wizard Report Selection

- NPV by Market report
- Average Revenue Per customer By Market report
- Total Estimated Net Income report
- Per Line Estimated Net Income report

When you have answered all of the Wizard questions, press the **Start** button. BACE will begin processing the scenario. When processing is complete, reports will be opened in Excel. Report files-reflecting the onscreen results-will be saved in the scenario directory.



# Navigating BACE

Despite the complexity and granularity of the business case, BACE was designed to run under standard business class computers using the Microsoft Windows® operating system. BACE was designed to be user friendly like any other Windows-based application.

This section of the Users Guide will describe the BACE interface.

#### BACE's Main Screen

When you start BACE and exit from the Wizard screens, you will see the main screen. From this screen, you will be able to access all functions necessary for an impairment study.

Along the upper portion of the screen, you will note the familiar Windows Menu Bar. The left hand portion of the screen displays the BACE Navigation Bar. The icons on the navigation bar provide shortcuts to the most frequently used BACE features. Along the bottom of the screen is the Status Bar. The Status Bar shows several important things. First, it provides the name of the scenario you are working on (Chapter 4 will provide more detail on scenarios). Second, it displays your User ID. Third, it will display notes or warnings on current processing.

A typical Main Screen is shown below.

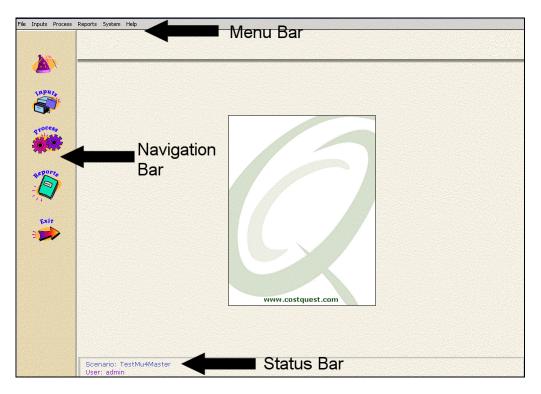


Figure 12--BACE Main Screen

#### Data Architecture

BACE retrieves and stores all input and output data in a consistent and logical format.

Input and processed data are stored as a scenario database. Each scenario is a database stored in a similarly named folder within the scenario directory.

Report data are stored in the same directory. Reports are created as either Microsoft Excel<sup>TM</sup> worksheet files or Excel compatible, comma separated variables (CSV) files.

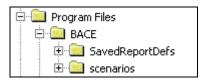


Figure 13--BACE Data Architecture

If you send tables to Excel (a feature under the Inputs Menu), these tables will be placed in this directory as well.

Chapter

# Organizing Study Data

BACE organizes study data in two ways: Scenarios and Inputs. A named collection of all Inputs used in a study is called a Scenario. The Scenario is the large scale way of storing all study assumptions and inputs and processed results.

Within a Scenario there are a series of tables used to manage individual inputs. Inputs are logically grouped and displayed within a table structure. Common tables are organized into groups.

The intent of this chapter is to describe both the management of scenarios and inputs.

#### Scenario Management

Scenario management is analogous to managing the databases and folders described in Chapter 3's topic, Data Architecture.

There are three features in BACE used to help manage scenarios.

Creating a New Scenario

You can create a new scenario by following this procedure.

- 1. From the **File** menu, select **New Scenario**
- 2. When the **New Scenario** box appears, enter a name for your Scenario. You should use standard Windows naming conventions (e.g., no reserved characters like '/')
- 3. Select a Scenario to copy from. A new BACE scenario must always be based on an existing scenario. In other words, which existing scenario will provide initial inputs values used in your new Scenario?
- 4. Enter any relevant notes into the **Comments** box. These notes are a useful way of tracking the intent of the new scenario.

Opening a New Scenario

When BACE opens, it opens to the last scenario used. If you prefer to open a different scenario, follow this procedure.

1. From the **File** menu, select **Open Scenario** 

2. When the **Open Scenario** box appears, select the Scenario you would like to open.

Modifying the Default Scenario

By design the default inputs, BellSouth\_XX.exe (where XX represents the two letter state abbreviation), cannot be modified. You will need to create a new scenario-with BellSouth\_XX.exe as the scenario to be copied from-before you can make any modifications.

Viewing Scenario Properties

BACE allows you to view the comments for each scenario, entered when the scenario was created.

To view the currently open scenarios properties, select **Scenario Properties** from the **File** menu.

#### Managing Inputs

BACE uses the Edit Inputs option to guide you through the input management

process. Click on the **Edit Inputs** icon along the left side of BACE's main screen to begin editing scenario inputs.



Figure 14—Inputs Icon

BACE provides two tools to help manage inputs. The first is the Table List. The Table List groups common tables into a series of hierarchical folders. This organization scheme lessens the need to sift through multiple tables individually. The second tool is the inputs grid itself. The inputs grid provides database like access to each table in BACE.

Table List

The Table List works to categorize input tables into common groups. For example, each table that is related to **CLEC Study Properties** is grouped into one folder.

Double clicking on a folder will open the folder and allow you to view the individual tables.

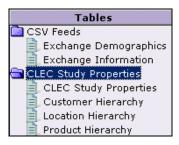


Figure 15--Table List

From the Edit Inputs screen you can hide the table list by clicking on the **Hide List** text. The **Hide List** text is located directly above the Table List.

Inputs Grid

BACE's input grid allows you to modify the data in input tables, using a database-like format.

Columns are resizable by holding your mouse over the column lines until your mouse cursor becomes a double arrow.



Figure 16--Resizing a column

At this point, you can hold your left mouse button and resize the columns.

Columns can be moved by holding your mouse over the column heading until your cursor becomes a downward facing arrow.



Figure 17--Moving Columns

At this point, you can hold your left mouse button and drag and drop the column into its new location.

Adding and Deleting Records from Tables<sup>4</sup>

Certain input tables are designated with an [A] or [D] or [A,D]. These bracketed characters indicate that you can [A]Add, [D]Delete or [Add and Delete] records from this table.

For designated tables, records can be added by clicking into the last row in the grid. This will be an empty row with an asterisk in the left most column.

For designated tables, records can be deleted by clicking on the leftmost column adjacent to the row you wish to delete (which will highlight the entire row), and then press the **Delete** key on your keyboard.

Time Based Inputs

Many inputs used by BACE are specific to a give year. Churn rate, for example is specified not only by customer segment, but by year.

To support these time-based inputs, keep in mind that BACE allows you to specify their value each year within the ten year study horizon.

<sup>&</sup>lt;sup>4</sup> While BACE is an open tool controlled by the user, care must be taken when tables are modified. BACE is a relational model. As such, table changes can impact how the entire system functions.

# Chapter

### Manual Processing

In addition to the Wizard described in Chapter 2, BACE allows you to manually



process Scenarios. The Wizard is the optimal method when you want to modify the high level, key aspects of a Scenario. Manual processing is best suited when you want to make detailed changes to scenarios or batch process multiple scenarios. To start Manual Processing, click on the Process icon, on the left side of BACE's main screen.

Figure 18—Process Icon

#### **BACE Processes**

BACE processing is defined by a series of four major processes as it calculates NPV. The processes are briefly described below.

Further detail can be found in the BACE Methodology Manual.

The P-Process calculates the prices of sold products and services.

The Q-Process calculates the quantity of sold products and services.

The R-Process calculates the revenue due to the firm based upon the prices and quantities determined in prior steps.

The ON-Process calculates the cost for the CLEC's operations, sales, marketing, capital expenditure (capex) and retirement capex. The ON-Process also develops the estimated net income analysis and the estimated taxes.

#### Manual Process

BACE's manual process screen allows you to run one scenario or batch process multiple scenarios. To manually process a scenario, follow the procedure below.

- 1. Select the **Process** Icon from BACE's Main Screen
- 2. Select the Scenario(s) you wish to process. You can select as many Scenarios as you wish, by clicking the check boxes on.
- 3. Select the reports that you would like the system to automatically run at the end of the processing. These reports are based on the Saved Report Settings (Chapter 6).

Once processing is completed, these reports are stored in the scenario directory that you are processing.

#### 4. Press the **Process** button to begin processing.

You should also select the Compact Database during processing option. This option will compress the Microsoft Access<sup>TM</sup> Database created by BACE. If you don't compress the databases, BACE may stop processing due to errors encountered when the processed scenario database exceeds the size limitation imposed by Microsoft Access.



# **BACE** Reporting

Rather than providing a limited number of predefined system reports, BACE is designed to give you access to the wealth of calculated data.

The reporting engine was designed with flexibility and simplicity in mind. Several standard reports are available, but creating your own reports or views of data is equally simple and described in the following section.

#### **Retrieving Information**

BACE's reporting interface allows you to query and analyze large amounts of data,



Figure 19—Reports Icon

while minimizing interaction with Structured Query Language (SQL). You can view the reporting engine by clicking on the Reports Icon shown on the left side of BACE's main screen.

SQL is used to retrieve data or to provide rudimentary statistics (Sums, Counts, Averages, etc) from data stored in a database. If you were writing SQL code, you would write a SQL statement to describe retrieval (selection) or statistical instructions.

Typically a SQL statement to retrieve data is constructed in four

parts.

1) A designation of from where you wish to pull the data from. In other words, what database or table will be the source of this information? In BACE, this information is provided in the Report Data Source pull down box.

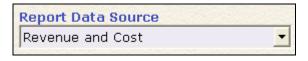


Figure 20--Report Data Source

2) A description of how you want to deal with the presented data. That is, if you want summary statistics, how should they appear in your output? In BACE, this information is provided under **Calculations To View** 

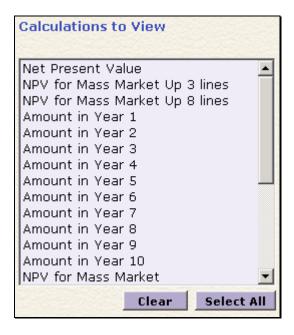


Figure 21--Calculated Fields Box

3) A description of any selection criteria to be applied to the fields you select. That is, do you want all of the data or a filtered subset of the data to examine? This description is made in BACE's **Filter Fields and Values** boxes.

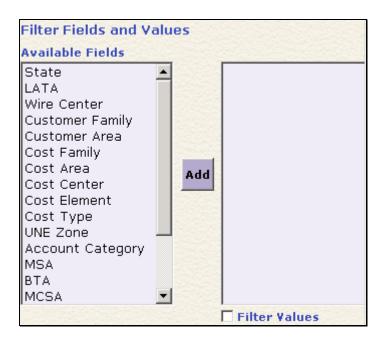


Figure 22--Where Or Conditional Fields

4) A description of how the data should be reported. In other words, what should appear in the output? This description is made in BACE's **Fields To View** section.

As you work with the interface, you'll note that when you select a **Filter Fields and Values**, the **Fields to View** section will automatically update with the field selected.



Figure 23—Fields To View

#### Reporting Examples

The best way to understand BACE's reporting engine is to create a few reports. The following section will provide a quick tutorial in its use.

Example One-Report all wirecenters in the study and their NPV

Creating this report requires three elements of information. First, what is the data source to use? In this case, use the *Revenue and Cost* Report Data Source.

Second, what fields should be listed and used to create subtotals? At this point, we only want to view the *State* and *Wirecenter*: These should be the only selections under the **Fields To View**.

Third, what calculated data should be shown? As described above, we want to view the NPV by wirecenter. If you wish to see the yearly new cash flows, you could select the *Amounts in Year (1-10)* as well as the *NPV*.

Configuring BACE's reporting interface would yield the following

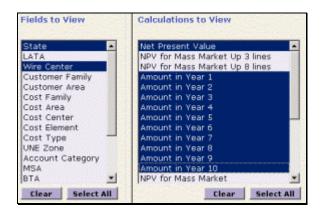


Figure 24--Reporting The NPV of wire centers

The Excel report file would appear as shown below.

	Α	В	С	D	Е
1	Proprietary	and Confidential			
2	Scenario:	TestFL			
3	Saved Rep	ort Name:			
4	Data Sourc	Revenue and Cost			
5	Date/Time:	12/19/2003 11:38			
6	User:	tro_user			
7					
8	State	Wire Center	Net Preser	Amount in	Amount in
9	FL	BCRTFLBT	3307177	3512318	5951545
10	FL	BCRTFLMA	7811112	7920825	13486615
11	FL	BCRTFLSA	4714779	6748765	11390673
12	FL	BGPIFLMA	-112385	569907.5	927795.9
13	FL	BKVLFLJF	-82299.3	514697.8	772669.3
14	FL	BLDWFLMA	-15170.1	290543.3	455113.3
15	FL	BLGLFLMA	716342.5	1060170	1703909
16	FL	BNNLFLMA	-47426	1040591	1625696
17	FL	BYBHFLMA	5277689	7685965	12728741
18	FL	CCBHFLAF	22341.06	23638.8	40862.28

Figure 25--CSV format output

Example Two—Produce a report of all operating expense in Georgia for LATAs 438 and 442 by wire center during the 10 year study

This report is a bit more complicated than the first. The first element to isolate is the data source. Again, use *Revenue and Cost* as the **Report Data Source**.

Next, select the calculated **Fields To View**. For this example, select *Amount in Year 1, Amount in Year 2* through *Amount in Year 10*. If you also would like the NPV of these flows, select *NPV*.

Third using the **Where/Conditional Fields** section, filter your data so that you view only Operating Expenses (OPEX). This is done by selecting **Account Category**.

Notice that when you make this selection, BACE looks up all possible values in this field (Note: this may take a few minutes for each filter since BACE is analyzing all potential values). After these values are determined, **Account Category Values** populate the right box. Next, select *OPEX* and click the **Add** button. This selection, where *Account Category* equals *OPEX*, will be added to the **Current Where Selections** box.

Finally select the *LATA*s for this report. This is done by setting *Location Center*(*LATA*)equal to LATAs 438 and 442 in the **Where/Conditional Fields** section. Then, adding this criteria to the **Current Where Selection**s box.

With these steps complete, start the report by clicking the **Run Report** button.

An example of the settings needed to run this report is shown below.

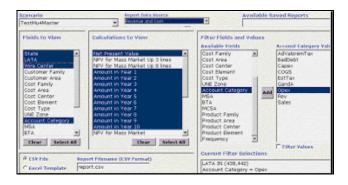


Figure 26--Finding the OPEX in LATAs

Note: The Filter Values checkbox allows you to constrain succeeding **Where/Conditional Fields** selections based upon values in the **Current Where Selections** box. For example, if you first selected Account Category = Opex, then selected the Filter Values checkbox, then selected Cost Center as your available field, the only values that would appear in the **Cost Center Values** box would be those Cost Centers associated with the Account Category of Opex.

#### Managing Reports

BACE allows you to save a report template by entering a name into the **Save Report Settings As** box. When you press the **Save Report** button, the values in the report will be saved. As noted in Chapter 5, these saved reports will show up as user selections on the Processing screen.

You can retrieve report settings by using the Saved Report Settings pulldown menu.

Selecting the **Open File in Excel** checkbox will open a saved report as a Microsoft Excel or compatible file. There may be times when you create a report larger than Excel can display. If this occurs you will get an error message from Excel indicating that the file was not loaded completely. This message indicates that your report

exceeds that maximum length (more than 64,000 records) accommodated by Excel. To inspect this report, use Microsoft Access to open the resulting CSV file.

#### Standard Data Sources

BACE is provided with several built in data sources. Each data source will be briefly described below.

*Revenue and Cost Data Source.* This data source provides information about firm revenues and cost. The source is the CMaster file.

*Price Data Source* This data source provides the Average Product Price by Location, Customer Segment and Product Segment. The source is the PMaster file.

*Quantity and Customer Counts Data Source.* This data source provides the quantity and customer count by Location, Customer Segment and Product Segment. The source is the RMaster file.

Avg Revenue Per Line. This data source provides Average Customer Revenue for Voice, Long Distance and Data by Geographic Area.

*Net Income Total (estimated)*: This data source provides an estimated net income statement for the 10 years of the study.

Net Income Per Line (estimated). This data source provides an estimated net income statement on a per line basis for the 10 years of the study.

*Omitted Markets.* This data source provides information on markets that were omitted during BACE optimizations.

#### Standard Reports

BACE ships with a large number of standard reports. These reports can be applied to most processed scenarios.

Standard reports include the following:

- Capex by Cost Category-Capital Expenditures by Cost Category
- Cost & Revenue-Time Flow-Cost and Revenue over time
- Cost-Summary-Summarized Cost Information
- Customers-Customer Type-Customer/Product Demographic Information
- Line Quantity-Customer Type-Customer/Line Demographic Information

- Negative Margin Markets-Data on Negative Margin Markets within study area
- Net Income-Per Line-An estimated per line net income report
- Net Income-Total-An estimated total net income report
- NPV-CEA UNE Zone-Net Present Value by UNE Zones in CEAs
- Revenue-CEA UNE Zone-Re venue by UNE Zones in CEAs

Chapter

# System Options

BACE has several system options that you should be aware of.

#### Changing Your Password

BACE allows you to manually change your password. You can change your password with the following procedure.

- 1. From the **System** option of the menu bar, select **Change Password.**
- 2. Enter the new password, exactly as you wish it to be recorded. You must enter the password in both the **New** and **Repeat Password** boxes. Password entry is case sensitive.

Password Rules

BACE enforces the following password rules. If the password you entered does not comply with these rules, BACE will ask for a new password.

- Passwords shall be manually entered in order to log into any BellSouth computer asset.
- No password shall be used for longer than sixty days.
- Passwords shall be a minimum of six characters in length. System administrative and other special privileged user passwords should be a minimum of eight characters in length.
- Passwords shall contain at least one alpha character and at least one numeric character unless prevented by the computer asset.
- Passwords shall not contain a string of three or more identical characters, letters or numbers such as 777 or XXX.
- Passwords shall not contain a string of three or more ascending or descending numeric or alphabetic characters such as 123, XYZ.

• Passwords shall not contain a string of four or more characters of the same type, either alpha, numeric or special/punctuation characters.